

REMARKS/ARGUMENTS

Claims 1-46 are pending in the application and are again rejected. Applicants have amended claims 1 and 33 and cancelled claims 34-41. Applicants respectfully request reconsideration in view of the amendments and the following arguments.

Applicants first thank the Examiner for the interview conducted on October 26, 2009. However, Applicants have not received a summary of the interview as of the filing date of this response.

In an effort to expedite prosecution, Applicants have amended claims 1 and 33 by the addition of “wherein the calibration scan is performed at a high scan point density compared to the scan point density of the experimental scan”, which finds direct support in paragraph [0100] of the application as filed. Applicants submit that the amended claims are differentiated from Kochergin. Applicants reserve the right to prosecute the original claims in one or more continuation applications.

Claim 1-3, 6-27, 32, 34-44 and 46 are rejected under 35 U.S.C. §102(e) as being unpatentable over Kochergin et al. Applicants respectfully disagree.

As discussed during the interview with the Examiner, Kochergin discloses an optical sensor diagnostic system using a tunable VCSEL 30 as light source. The Examiner stated that Kochergin obtains at least one calibration result in that “Control block 49 responds to the electrical detection signal from the photodetector 48... by calibrating a variable voltage or other tuning signal for the tunable VCSEL 30...”. However, this calibration directly relates to a continuous calibration of the wavelength

output from the VCSEL 30 and not in any way to a calibration result that is subsequently used to evaluate experimental results.

Applicants respectfully submit that Fig. 4 of Kochergin shows an example of a shift in wavelength of a SPR resonance profile, and that there is no indication or no disclosure of any calibration profile in Fig. 4 or any disclosure associated therewith. More in detail Kochergin states in col. 16 line 21 to 27:

An example of a surface plasmon resonance-based sensor transmission spectrum is given in FIG. 4. The valley in the curve, caused by a surface plasmon, is shifted in wavelength by, for example, a biomass specimen to be detected as it is adsorbed onto the sensor surface. The absolute value of said shift provides very precise information about the concentration of, for example, a reagent in the solution.

Hence, Kochergin does not disclose fitting of a calibration profile to experimental result to determine the resonance parameter.

However in order to better reflect the underlying principles of the present invention, claim 1 has been amended as specified above. By this amendment, claim 1 is even further distinguished from Kochergin and should therefore be patentable. As claims 2-3, 6-27 and 32 all are dependent upon claim 1, Applicants assert that they are also patentable.

With regard to claim 42, which is also rejected under 35 U.S.C. §102(e) as being unpatentable over Kochergin et al., it is submitted that Kochergin does not in any way disclose registration of any calibration profiles relating to the SPR response and specifically not any golden calibration profile for the type of chip to be qualified. Kochergin does show in general terms how to detect the shift in resonance wavelength in a SPR configuration and some ways of how to best determine said shift

as is disclosed in detail in col. 17 lines 22 to 46, figs 5b and 5c. However, Kochergin does not at all suggest the steps of comparing a calibration result with a golden calibration profile and determining whether the chip is suitable for use by applying selection criteria. As mentioned above, the section referred to (col. 16 line 21 to 27, fig. 4), is solely a generic example of the wavelength shift that is induced by adsorption of a biomass specimen on the SPR surface. Hence, Applicants assert that claim 42 is patentable over Kochergin. Similarly, claims 43-44 and 46 are also patentable.

Claims 4, 5, 28-31, 33 and 45 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kochergin et al. in view of Thorton. Applicants respectfully disagree.

Applicants submit that as claim 1 has been amended, the rejections to claims 4, 5 and 28-31 should now be withdrawn in view of the amendment and arguments above. Similarly, the rejection to claim 45 should also be withdrawn.

Applicants have amended claim 33, introducing the same limitation as in claim 1. As such, Applicants submit that the claim as amended is patentable for substantially the same reasons as stated above.

Applicants respectfully submit that claims 1-33 and 42-46 are patentable. Applicants assert that this application is in condition for allowance and such action is earnestly requested.

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Early and favorable consideration is respectfully requested.

Respectfully submitted,

GE Healthcare Bio-Sciences Corp.

By: /Yonggang Ji/
Yonggang Ji
Reg. No.: 53,073
Agent for Applicant

GE Healthcare Bio-Sciences Corp.
800 Centennial Avenue
P. O. Box 1327
Piscataway, New Jersey 08855-1327

Tel: (732) 980-2875
Fax: (732) 457-8463

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Signature: /Melissa Leck.

Name: Melissa Leck